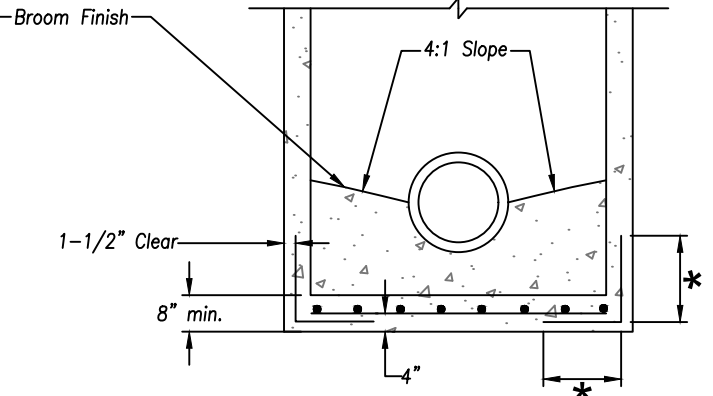
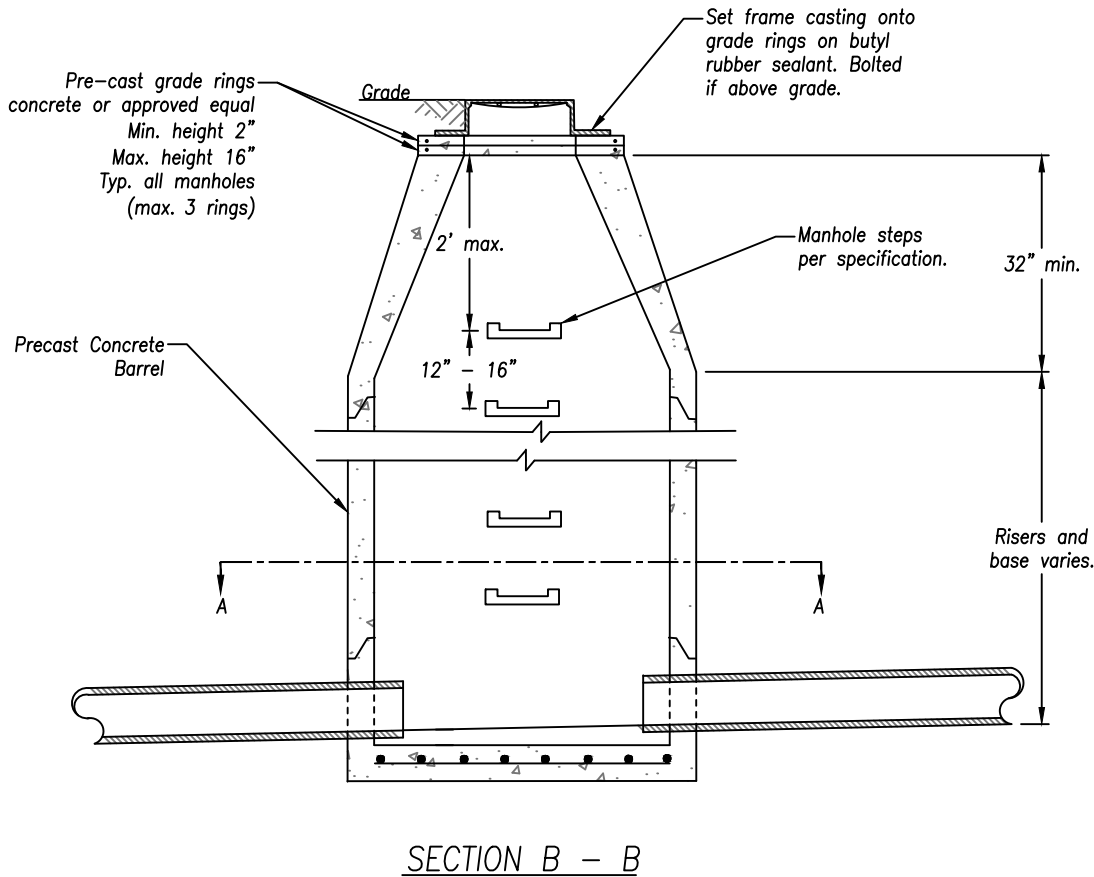


#### Steel Reinforcement Cross-sectional Area, $A_s$

MH Depth (feet)	$A_s$ (in <sup>2</sup> /ft)
0' - 10'	0.17
11' - 20'	0.22
21' - 30'	0.27
31' - 40'	0.32



\* 30 x Bar Dia.  
(12" min.)



Pre-cast grade rings  
concrete or approved equal  
Min. height 2"  
Max. height 16"  
Typ. all manholes  
(max. 3 rings)

Set frame casting onto  
grade rings on butyl  
rubber sealant. Bolted  
if above grade.

Manhole steps  
per specification.

Risers and  
base varies.